Welcome to the quarterly newsletter from E.J. Peiker, Nature Photographer and www.EJPhoto.com. In this quarterly email publication, I will keep subscribers posted on upcoming workshops as well as sharing some photos and experiences with you. I will also give you brief impressions on any new equipment that I get the opportunity to use and any other general information in the world of digital Nature Photography. Please feel free to forward this along to other photographers and interested parties but please do so only by forwarding this newsletter in its entirety. Note that all content is copyrighted by E.J. Peiker. If you would like to be added or deleted to the mailing list, just send me an email message at ejpeiker@cox.net. Back issues are available online at http://www.ejphoto.com/newsletter.htm
How to correct Perspective Distortion in Photoshop

Landscape photographers often find themselves in situations where they must shoot with a wide angle lens that is tilted either up in order to capture the scene above (such as waterfalls or the sky) or tilted down when trying to capture a landscape with a prominent foreground object. Any parallel lines, like tree trunks will converge or diverge in an unnatural fashion when the camera and lens are tilted. Photographers that use lenses with movements such as those provided on Perspective Control lenses or Tilt/Shift lenses can use the shift function to correct for this phenomenon but these lenses add a lot of bulk in the field, are very expensive, do not provide autofocus and are not owned by the vast majority of photographers. Fortunately there is a fairly easy way to correct for this perspective distortion in Photoshop. In this tutorial I will show the reader how to accomplish this task.

We will start with a photo of Yosemite Falls in Yosemite National Park, California. To the left is the original image. Note that the foreground trees are leaning inward from bottom to top due to pointing the lens up above level to capture part of the upper falls. The goal is to correct this so that the viewer doesn’t get the sense of falling backwards.

Before we start modifying the image we need to make sure that we will end up with a final product that isn't squashed or stretched. It is important to measure the height of a prominent feature so that in the end its relative height and proportions are correct. In this image measuring the height of the lower falls using Photoshop’s ruler border is an easy way to do this.
This is illustrated in the image to the right. If you look carefully you can see that I have drawn some black lines for illustrating how I measure the height of a prominent feature. In this case the lower falls extend from 2100 to 3320 pixels or a total of 1220 pixels. You don’t need to draw in the lines - just remember the height that the falls are supposed to be or write it down. We will need this after correcting the perspective as this has a tendency to change the size of the main features in the picture.

Now it is time to correct the perspective distortion which causes the trees to appear to fall in from the top. First select the entire image (Ctrl A on PC and Cmd A on Mac). Next, select the Perspective Transform tool by clicking on Edit > Transform > Perspective. The image selection will turn into a solid rectangle around the image with handles in each corner and at the midpoint of each side. The corners can be dragged outward which will start to pull the trees apart. The center handles will move the entire end of the picture left or right which allows you to straighten the trees vertically once they are parallel. Shown at left is our photo with the trees now parallel but leaning very slightly to the right which can easily be corrected with the top center handle. Once you get everything lined up the way you would like, simply double click in the center of the photo to apply the perspective transformation.

As you drag the corner handles you will see the features in the image compress a bit in the vertical
direction. This is why we measured the height of the lower falls. We will next re-establish the correct height.

Start by adding a bit of canvas on top. This can be done several ways. The crop tool is an easy way to do it or you can simply use the Canvas Size tool. In the illustration on the left the added white canvas on top is shown. Next we will use the Free Transform Tool to re-establish the correct height. Select the image area and then hit Ctrl-T (PC) or Cmd-T (Mac) or Edit > Free Transform from the pull down menus. You will again see the 4 corners and the center points of each side sprout a small square handle. Simply grab the handle on the top middle of the photo and drag upwards until the falls are again the right height - 1220 pixels tall in this example. Double click to finalize the correction.

Finish the image off by cropping any remaining canvas and you have the final image. The final image for this exercise is shown to the right. In the situation where the camera had to be pointed downward and the trees are diverging at the top, you would simply use the handles at the bottom of the picture rather than those at the top to make the perspective correction.

This is an easy and fast way to correct for perspective distortion in your landscape photography.
Some Hot New Products Announced!

This year the Consumer Electronics Show (CES) and the Photo Marketing Association (PMA) show was a combined event. It was held in Las Vegas in January. The show produced an unusual amount of pre announcements and show announcements of new gear. The complete turnover of every manufacturer’s point and shoot line is always expected at these sorts of shows but this year a few new DSLRs and a number of interesting new mirrorless camera’s were introduced as well as some point and shoot cameras sporting a large DSLR type sensor. Here’s a quick summary of the most interesting items for my audience:

**Nikon** introduced the D4. This is the highly anticipated successor to the previously unequaled D3s. Like Canon, with the announcement of the EOS 1DX, Nikon put more emphasis on developing video capability than it did on doing anything other than evolutionary changes for the still photographer. The camera sports a 16 megapixel full frame sensor which should continue to provide exceptional noise characteristics, up to 11 frames per second, an improved AF system that is now more finely tuned for lens combinations up to f/8, a slightly larger rear LCD, and a revised control layout. The latter will drive some photographers crazy when switching back and forth between a D3 and a D4. The most peculiar thing about this camera is the elimination of the second CF card slot and the addition of an XQD card slot – a card that only one manufacturer has committed to producing so far. Canon finally abandoned the dual format card slots and gave photographers what they wanted and Nikon decides to take their place... However, early tests with the only XQD card available though shows data rates that are 50% faster than the fastest CF cards. The camera also uses a new battery and charger to meet some new Japanese regulations, which means you have to carry two different chargers with you if you are using a D4 and a D3/D3s/D3x. Overall it looks like a nice camera but these ecosystem items that are different from the previous body will be a nuisance. A new 85mm f/1.8 FX lens was also introduced which will likely find use primarily as a compact portrait lens. A few weeks after CES/PMA, Nikon stunned the world with the D800 announcement which includes a 36 megapixel full frame sensor. Additionally, an offshoot model called the D800E was introduced which replaces the usual low pass anti-
aliasing filter with a much milder filter. This should increase resolution significantly but with the addition of moiré pattern interference. The D800E will likely be very useful in landscape and still-life photography but not most other types of photography where moiré interference is a reality. I’ll have much more to say about the D800 once I get my hands on one in the future.

Fuji introduced the interchangeable lens version of the X100. The new camera is called the X-Pro 1. It is a mirrorless camera with a classic rangefinder design but it is quite a bit bulkier than the Panasonic Lumix G1X or the Sony NEX cameras. It uses a 16 megapixel APS-C sensor and no low pass filter which should allow it to significantly outresolve other 16 megapixel cameras. It also has an evolution of the hybrid optical/electronic viewfinder from the X100. This looks like a very compelling camera that should deliver true professional grade results in a smaller package than the traditional DSLR. Whether or not Fuji will be able to populate a lens lineup to make it a great tool remains to be seen. Initially three prime lenses will be introduced.

Canon continues to be the only major manufacturer absent from the interchangeable lens mirrorless camera segment. Instead, Canon has introduced the G1 X in an attempt to retain its loyal followers. The G1 X is essentially a point and shoot camera like the G12 but with a sensor that is close to a micro 4/3 sized sensor. It has a fixed 28-112mm equivalent lens. While Canon loyalists will probably love this camera, it falls significantly short in flexibility to what is offered by the competition which all offer interchangeable lenses in a camera of this class. After the show, Canon introduced the EOS 5D Mark III. My initial reaction is underwhelming and Canon loyalists are split on whether this was a good step or not. It seems to be a relatively minor tweak of the 5D mark II with a sensor that is approximately the same resolution, a somewhat faster frame rate, and a better autofocus system. There are likely
some significant video improvements which is where Canon seems to be spending almost all of their development efforts these days. Overall, at a price point higher than the D800, it seems like Canon may have missed the mark with the 5D3 - time will tell. (Note that I covered the EOS 1DX in the last issue of Quack)

Panasonic previewed two fast pro grade zooms for the micro 4/3 system. The 12-35 f/2.8 is the equivalent to a full sized system’s 24-70mm lens. The 35-100 f/2.8 is the equivalent of the workhorse 70-200 f/2.8 lens for full frame DSLRs. These lenses, if they come to fruition would finally bring pro-grade fast zooms to the micro 4/3 market. The lack of such high grade glass is currently limiting micro 4/3 penetration into the pro still photo market.

Olympus proved that it is not down and out after one of the most amazing financial scandals of all time. With the introduction of the OM-D, Olympus takes one back to the glory days of the compact Olympus OM film system. This was one of the most highly acclaimed compact 35mm SLR camera lines of all times with a strong cult following. The new camera boasts the 16 megapixel Panasonic micro 4/3 sensor with some measurable improvements to dynamic range. This will be an exciting camera to try out and has become a contender in my constant quest to get a lighter pro-grade camera system.

SoCal DuckShop A Major Success

This year, for the first time, we expanded the SoCal DuckShop to cover both the San Diego and Orange County areas of Southern California in a single workshop lasting 5 days rather than separate 2 1/2 day workshops and the format really worked well. Seven great participants and I photographed some of the regions hottest bird photography spots.
Marketing the workshop through NatureScapes and utilizing the fantastic event planning skills of Erin Masters made this year's workshop the best ever. From Wood Ducks, to Pelicans, to some of the coolest cormorants ever, and even Harbor Seal pups, a great time was had by all. A gallery of some of the images I took can be found here:  

Workshop Announcements

In just 6 months, I will be leading what promises to be one of the most unique, and, dare I say, epic workshops I have ever led. Through NatureScapes Certified Workshops, I will be offering the New Zealand experience of a lifetime. This incredible 18 day (16 day in New Zealand plus 2 travel days) will feature both the magnificent landscapes of the South Island and the abundant and beautiful bird life of both the North and South Islands and even Stewart Island. In addition to myself as workshop leader, there will be a local guide and roomy vehicle transportation so that you can comfortably take any and all gear and have it next to you ready to shoot. From various species of Albatross to the world's only Alpine Parrot; from the rarest Penguin on Earth to the beautiful Paradise Shelduck; we will go after them all. From the spectacular 12,000 foot high Mount Cook to Milford Sound (arguably the most beautiful spot on Earth), to the intimate and unique Moeraki Boulders, we will shoot them all and strive to do it in the best light possible. Air travel between Auckland on the North Island and Christchurch on the South Island, all ground transportation, boat charters, and hotel accommodations are included. While it may seem expensive as New Zealand and all of the trip's inclusions are pricey, this trip has been priced with very little margin and you would be hard pressed to put this itinerary together at this cost on your own. If you would like to learn more and see more pictures from this wonderful part of the world, please click on the following link starting on September 21, 2011:  
http://www.naturescapes.net/workshops/new_zealand_2012
Two eBooks Now Available

My eBook “Ducks of North America – The Photographer’s Guide” is an essential text that covers all of the techniques needed to get the best shots of waterfowl and birds in general. It covers every species in the wild and in captivity in North America and gives species specific tips on how best to capture them and where to find them. Eleven years in the making, this book is a great tool for the beginning, intermediate or advanced waterfowl photographer. The tips in it are easily applied to all birds and most other subjects too. It sells for $30. While this is expensive for an eBook due to the incredible amount of time and money it took to create it, it will easily save you 10 times that in aggravation, time, and failed attempts.

I have also released my previously privately published paper book “West – A Collection of Photographs From The Western United States” in a fully updated and revised eBook version. It is available for $10.

Both books can be ordered from the fine outlets you will find at this link: http://www.ejphoto.com/ebook_page.htm

Facebook Page

On my Facebook Fan Page, I am keeping those interested up to date on what photo excursions I go on as well as short commentaries on a variety of photo related subjects and tools. I also have nearly 100 galleries accessible through there. Please visit: http://www.facebook.com/pages/EJ-Peiker-Nature-Photographer/150804446733 and if you like what you see, please click the “Like” button.

Private Photography Instruction and Consulting Services

In addition to the DuckShop photo workshops which I launched 10 years, I also offer private instruction in Wildlife and Landscape photography at the place of your choosing within the USA and Canada. These private workshops are of the one on one variety (or two on one). Clients may schedule time in 4 hour time blocks for either classroom or field sessions. With just two people, a number of shooting locations become possible that aren’t possible for larger groups
and thereby making it possible to photograph some species or locations that are not attainable with larger groups. More specific instruction, based on the client’s specific needs, can be given using this delivery method in either the classroom or in the field. For more information please see the following link:  http://www.ejphoto.com/duckshop_private.htm

I also offer both photo equipment and computer workstation/digital darkroom consulting services. This allows me to combine my 27 years of work in the computer industry with my lifetime of photographic experience and provide services at a technical level that are hard to find elsewhere. Contact me for rates and specifics or visit my rate sheet: http://www.ejphoto.com/Quack%20PDF/Rate%20Scedule.pdf

**Disclaimers:**

E.J. Peiker conducts consulting services and product design services for a number of photographic product companies. The companies change from time to time:

E.J. Peiker is a consultant for LensCoat and receives compensation from LensCoat. www.lenscoat.com

E.J. Peiker writes for and is supported by Singh-Ray Filters and receives non-monetary compensation from Singh-Ray Filters. www.singh-ray.com

E.J. Peiker is a Wimberley Professional Services featured photographer and receives non-monetary compensation from Wimberley. Visit Wimberley at www.tripodhead.com

E.J. Peiker is a member of Nikon Professional Services and receives some services free of charge from Nikon Corp.

E.J. Peiker is sponsored by Hunt's Photo and Video - New England's largest photography retailer. Visit them at www.huntsphotoandvideo.com/


Those that know me, know I would not endorse a product even for compensation if I did not feel it were a superior product.

**Legal Notice:** Written and Photographic Content © E.J. Peiker, Nature Photographer. The text and photographs contained herein may not be copied or reproduced without written consent. This newsletter may be forwarded without restriction unaltered and in its entirety only.